Case 2844

Oniscus asellus Linnaeus, 1758 (Crustacea, Isopoda): proposed designation of a neotype

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Abstract. The purpose of this application is to confirm as neotype of the nominal species *Oniscus asellus* Linnaeus, 1758 a specimen from Uppsala, Sweden proposed by Bilton (1994). A specimen labelled '*asellus*' in Linnaeus's handwriting belongs to the taxon always called *Porcellio scaber* Latreille, 1804. *O. asellus* and *P. scaber* are amongst the commonest woodlice of Europe and are the type species of their genera. Acceptance of the Linnaean specimen as the name-bearing type of *O. asellus* would transfer this name to *P. scaber* as always understood, and would confuse isopod names at the ranks of family, genus and species.

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1. The nominal species *Oniscus asellus* Linnaeus, 1758 (p. 637) was based on a four-word description and five references; as originally defined the name could apply to almost all non-conglobating species of terrestrial isopod.

2. The composite nature of *O. asellus* was recognized by early authors. The taxon was first more narrowly defined by De Geer (1778, p. 549, pl. 35, figs. 3–10), who applied the name to a woodlouse with seven antennal segments, including three in the terminal flagellum, and prominent lateral lobes on the head. The description and figures indicate that De Geer was referring to *O. asellus* as currently interpreted. However, the De Geer collection in the Naturhistoriska Riksmuseet in Stockholm contains three specimens below a label bearing the name *Oniscus asellus*. One of these is *O. asellus* as now understood, one a specimen of *Cylisticus convexus* (De Geer, 1778, p. 553), and the third an undetermined porcellionid possibly of non-European origin. The fact that a separate De Geer species (*C. convexus*) stands under the name *O. asellus* suggests that subsequent arrangement of his material has occurred.

3. Cuvier (1792, p. 22, pl. 26, figs. 11–13) introduced the name *Oniscus murarius*. The description and figures show that the species concerned is *O. asellus* sensu De Geer. In the nineteenth and early twentieth centuries the name *O. murarius* was widely used for the species (e.g. Budde-Lund, 1885; Verhoeff, 1908). Sars (1899) adopted *O. asellus* sensu De Geer (1778) and Latreille (1804), and this application of the name has for many years entirely replaced *O. murarius* for one of the commonest woodlice in Europe (see for example Vandel, 1962; Gruner, 1966; Sutton, 1972; Bilton, 1994).

4. Cuvier (1792, p. 23, pl. 26, figs. 9–10) applied the name *O. asellus* to another species, with a two-segmented antennal flagellum. He remarked that he did this for the sole reason that the species was the most common, noting that the description by Linnaeus applied equally well to three species. Latreille (1804, p. 39) did not follow

Cuvier's usage, and expressly based his new genus *Porcellio* (p. 45) on 'l'espèce qu'il [Cuvier] appelle *aselle*'; this species was described on p. 45 under the name *P. scaber*, which has been adopted by all subsequent authors. The differences between *O. asellus* and *P. scaber* are well illustrated by Sutton (1972, fig. 27). The Commission rejected '*O. asellus* Cuvier, 1792' as a junior homonym of *O. asellus* Linnaeus in Direction 88 (March 1958), but, as mentioned above, Cuvier did not propose a new name and merely applied that of Linnaeus in a way which, although different from De Geer (1778), was reasonable at the time but not adopted by Latreille (1804) or later authors.

5. The names *Oniscus* and *asellus* of Linnaeus, 1758 and *Porcellio* and *scaber* of Latreille, 1804 were placed on the relevant Official Lists in Opinion 104 (September 1928). The entry for *Oniscus* on the Official List (1987) records 'Stiles, 1928' (i.e. Opinion 104) for the designation of *O. asellus* as the type species, but this is an error: Direction 88 had noted a designation by E. Desmarest in 1858. An earlier designation of *O. asellus* (in the current sense) is that by Audouin (1823, p. 222). Latreille (1810, p. 423) had previously designated *O. murarius* as the type but he did not there synonymize this nominal species, not originally included, with *O. asellus* (although he had done so in 1804 and elsewhere).

6. The collection at the Linnean Society in London contains a single specimen labelled '*asellus*' in Linnaeus's handwriting. The label has pin-holes at both ends, and may have been attached to this specimen by a later worker (see Day & Fitton, 1978 for a discussion of this practice). The specimen is an adult male of the species always called *Porcellio scaber*, but this may simply reflect the composite nature of Linnaeus's concept of *Oniscus asellus*.

7. Acceptance of the specimen at the Linnean Society as the name-bearing type of *O. asellus* would mean reverting to the specific name *murarius* Cuvier, 1792 for *O. asellus* auct. Much more seriously, such acceptance would transfer the generic name *Oniscus* to the taxon called *Porcellio* Latreille, 1804; *Porcellio* would disappear, *P. scaber* would become *O. asellus*, and *murarius* Cuvier would need a new nominal genus. The family name ONISCIDAE would take the meaning of PORCELLIONIDAE, and a new family name would be needed to replace it. All this would create intolerable confusion.

8. To avoid the situation given in the previous paragraph and because of the early history of the name, it is desirable to define *O. asellus* by a neotype. Another reason for the present application is that I have recently described a subspecies, *O. asellus occidentalis* Bilton, 1994 (p. 332). In that paper I have differentiated *O. a. asellus* and *O. a. occidentalis*, and designated a holotype for the latter from Lydford Gorge, Devon, England. The nominotypical subspecies *O. a. asellus* Linnaeus, 1758 has no type locality but I (Bilton, 1994, p. 331) have proposed a neotype from the Linneträdgården, Uppsala, Sweden. The types of both subspecies are deposited in the Natural History Museum, London. It is necessary for the proposed neotype designation for *Oniscus asellus* to be validated by the Commission.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Oniscus asellus* Linnaeus, 1758 and to designate as neotype the specimen from Uppsala, Sweden proposed by Bilton (1994);

(2) to amend the entry for *Oniscus* Linnaeus, 1758 on the Official List of Generic Names in Zoology to record that *O. asellus* was designated as the type species by Audouin (1823);

(3) to add to the entry for *Oniscus asellus* Linnaeus, 1758 on the Official List of Specific Names in Zoology an endorsement recording that this nominal species is to be defined by the neotype designated in (1) above.

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